



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/721,998

11/26/2003

Hirotsugu Okura

65933-053

6542

7590 06/02/2008
McDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

BOKHARI, SYED M

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

06/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/721,998	Applicant(s) OKURA, HIROTSUGU	
	Examiner SYED BOKHARI	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant amendment filed on February 27th, 2008 has been entered. Claims 1, 5, 11 and 15 have been amended. Claims 1-16 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3, 5-7, 9-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaraman et al. (US 2003/0210694 A1) and Yoshizawa et al. (US 2003/0084186).

Jayaraman et al. discloses a communication system for content routing architecture for enhanced internet services with the following features: regarding claim 1, a packet transmission apparatus comprising (Fig. 4, intelligent content routing network, see "routing data packets within the network" recited in paragraph 0076 lines 1-4, paragraph 0077 line 1 and paragraph 0078 lines 1-2), an extraction unit which extracts information from a stream packet to be sent to a terminal (Fig. 6, system architecture of designed intelligent content based router, see "capture and extraction units" recited in paragraph 0157 lines 1-7), information indicating a location where an individual program for performing a specific process on the stream is stored (Fig. 6, system architecture of designed intelligent content based router, see "locate the server address and form data location table" recited in paragraph 0118 lines 9-14); regarding claim 5, a packet transmission apparatus comprising (Fig. 4, intelligent content routing network, see "routing data packets within the network" recited in paragraph 0076 lines 1-4, paragraph 0077 line 1 and paragraph 0078 lines 1-2), an extraction unit which extracts information from a stream packet to be sent to a terminal (Fig. 6, system architecture of designed intelligent content based router, see "capture and extraction units" recited in paragraph 0157 lines 1-7) and the information indicating a characteristic of the stream data (Fig. 6, system architecture of designed intelligent content based router, see "locate the server address and form data location table" recited in paragraph 0118 lines 9-14); regarding claim 9, further comprising a switch unit which selects from the storage an individual program for converting the packet in accordance with a processing capacity of the terminal (Fig. 6, system architecture of designed

intelligent content based router, see “switching unit” recited in paragraph 0160 lines 1-9); regarding claim 11, a program obtainment method comprising (Fig. 4, intelligent content routing network, see “routing data packets within the network” recited in paragraph 0076 lines 1-4, paragraph 0077 line 1 and paragraph 0078 lines 1-2), extracting information from a stream packet to be sent to a terminal (Fig. 6, system architecture of designed intelligent content based router, see “capture and extraction units” recited in paragraph 0157 lines 1-7) and information indicating a location where an individual program for performing a specific process on the stream is stored (Fig. 6, system architecture of designed intelligent content based router, see “locate the server address and form data location table” recited in paragraph 0118 lines 9-14) and regarding claim 14, A program obtainment method comprising (Fig. 4, intelligent content routing network, see “routing data packets within the network” recited in paragraph 0076 lines 1-4, paragraph 0077 line 1 and paragraph 0078 lines 1-2), extracting information from a stream packet to be sent to a terminal (Fig. 6, system architecture of designed intelligent content based router, see “capture and extraction units” recited in paragraph 0157 lines 1-7) and information indicating a characteristic of the stream data (Fig. 6, system architecture of designed intelligent content based router, see “locate the server address and form data location table” recited in paragraph 0118 lines 9-14).

Jayaraman et al. does not disclose the following features: regarding claim 1, a download unit which downloads the individual program from the location, a storage which stores the downloaded individual program and an execution unit which executes the individual program by incorporating the individual program into a packet processing

on the stream; regarding claim 2, further comprising a switch unit which provides the execution unit with a switchover instruction to incorporate the individual program after the download of the individual program is completed wherein the execution unit performs a normal packet transmission processing on the stream until receiving the switchover instruction; regarding claim 3, wherein the storage stores a preliminary program and the switch unit provides the execution unit with a switchover instruction to incorporate the preliminary program until the download of the individual program is completed; regarding claim 5 a download unit which searches and downloads an individual program suitable for the characteristic, a storage which stores the downloaded individual program and an execution unit which executes the individual program by incorporating the individual program into a packet processing on the stream; regarding claim 6, further comprising a switch unit which provides the execution unit with a switchover instruction to incorporate the individual program after the download of the individual program is completed wherein the execution unit performs a normal packet transmission processing on the stream until receiving the switchover instruction; regarding claim 7, wherein the storage stores a preliminary program and the switch unit provides the execution unit with a switchover instruction to incorporate the preliminary program until the download of the individual program is completed; regarding claim 9, provides the execution unit with a switchover instruction to incorporate the selected individual program; regarding claim 10, further comprising a switch unit which selects from the storage an individual program for converting the packet in accordance with a wireless communication quality if the terminal connects by wireless, and provides the

execution unit with a switchover instruction to incorporate the selected individual program; regarding claim 11, performing a normal packet transmission processing on the stream, while the individual program is being downloaded from the location, performing a packet processing continuously by incorporating the individual program into the packet processing once the download of the individual program is completed; regarding claim 12, further comprising storing a preliminary program beforehand and performing the packet processing by incorporating the preliminary program until the download of the individual program is completed; regarding claim 14 performing a normal packet transmission processing on the stream, while the individual program suitable for the characteristic is being downloaded and performing a packet processing continuously by incorporating the individual program into the packet processing once the download of the individual program is completed and regarding claim 15, further comprising storing a preliminary program beforehand and performing the packet processing by incorporating the preliminary program until the download of the individual program is completed.

Yoshizawa et al. disclose a communication system for programmable network router and switch: regarding claim 1, a download unit which downloads the individual program from the location (Fig. 2, block diagram illustrating network device router or switch, see “it involves the downloading of the program” recited in paragraph 0030 line 1-7), a storage which stores the downloaded individual program (Fig. 2, block diagram illustrating network device router or switch, see “the physical location of the stored program is transparent to API” recited in paragraph 0031 line 1-6) and an execution unit

which executes the individual program by incorporating the individual program into a packet processing on the stream (Fig. 2, block diagram illustrating network device router or switch, see “the stored program is being executed in packet processing” recited in paragraph 0008 line 1-14); regarding claim 2, further comprising a switch unit which provides the execution unit with a switchover instruction to incorporate the individual program after the download of the individual program is completed (Fig. 2, block diagram illustrating network device router or switch, see “the routers are used to switch the video data from the sever 10 through network to the viewers” recited in paragraph 0014 line 1-10) wherein the execution unit performs a normal packet transmission processing on the stream until receiving the switchover instruction (Fig. 2, block diagram illustrating network device router or switch, see “this allows information from data network to be forwarded on to data processing server for execution” recited in paragraph 0019 line 11-17); regarding claim 3, wherein the storage stores a preliminary program (Fig. 2, block diagram illustrating network device router or switch, see “flow control table is stored within the device and maintains entries” recited in paragraph 0009 line 1-2) and the switch unit provides the execution unit with a switchover instruction to incorporate the preliminary program until the download of the individual program is completed (Fig. 2, block diagram illustrating network device router or switch, see “this allows information from data network to be forwarded on to data processing server for execution” recited in paragraph 0019 line 11-17); regarding claim 5 a download unit which searches and downloads an individual program suitable for the characteristic (Fig. 2, block diagram illustrating network device router or switch, see “it involves the

downloading of the program” recited in paragraph 0030 line 1-7), a storage which stores the downloaded individual program (Fig. 2, block diagram illustrating network device router or switch, see “the physical location of the stored program is transparent to API” recited in paragraph 0031 line 1-6) and an execution unit which executes the individual program by incorporating the individual program into a packet processing on the stream (Fig. 2, block diagram illustrating network device router or switch, see “the stored program is being executed in packet processing” recited in paragraph 0008 line 1-14); regarding claim 6, further comprising a switch unit which provides the execution unit with a switchover instruction to incorporate the individual program after the download of the individual program is completed (Fig. 2, block diagram illustrating network device router or switch, see “the routers are used to switch the video data from the sever 10 through network to the viewers” recited in paragraph 0014 line 1-10) wherein the execution unit performs a normal packet transmission processing on the stream until receiving the switchover instruction (Fig. 2, block diagram illustrating network device router or switch, see “this allows information from data network to be forwarded on to data processing server for execution” recited in paragraph 0019 line 11-17); regarding claim 7, wherein the storage stores a preliminary program (Fig. 2, block diagram illustrating network device router or switch, see “flow control table is stored within the device and maintains entries” recited in paragraph 0009 line 1-2) and the switch unit provides the execution unit with a switchover instruction to incorporate the preliminary program until the download of the individual program is completed (Fig. 2, block diagram illustrating network device router or switch, see “this allows information from data

network to be forwarded on to data processing server for execution” recited in paragraph 0019 line 11-17); regarding claim 9, provides the execution unit with a switchover instruction to incorporate the selected individual program (Fig. 2, block diagram illustrating network device router or switch, see “the stored program is being executed in packet processing” recited in paragraph 0008 line 1-14); regarding claim 10, further comprising a switch unit which selects from the storage an individual program for converting the packet in accordance with a wireless communication quality if the terminal connects by wireless (Fig. 2, block diagram illustrating network device router or switch, see “the stored program is being executed in packet processing” recited in paragraph 0008 line 1-14), and provides the execution unit with a switchover instruction to incorporate the selected individual program (Fig. 2, block diagram illustrating network device router or switch, see “this allows information from data network to be forwarded on to data processing server for execution” recited in paragraph 0019 line 11-17); regarding claim 11, performing a normal packet transmission processing on the stream (Fig. 2, block diagram illustrating network device router or switch, see “it involves the downloading of the program” recited in paragraph 0030 line 1-7), while the individual program is being downloaded from the location (Fig. 2, block diagram illustrating network device router or switch, see “the physical location of the stored program is transparent to API” recited in paragraph 0031 line 1-6), performing a packet processing continuously by incorporating the individual program into the packet processing once the download of the individual program is completed (Fig. 2, block diagram illustrating network device router or switch, see “the stored program is being executed in packet

processing” recited in paragraph 0008 line 1-14); regarding claim 12, further comprising storing a preliminary program beforehand (Fig. 2, block diagram illustrating network device router or switch, see “flow control table is stored within the device and maintains entries” recited in paragraph 0009 line 1-2) and performing the packet processing by incorporating the preliminary program until the download of the individual program is completed (Fig. 2, block diagram illustrating network device router or switch, see “the stored program is being executed in packet processing” recited in paragraph 0008 line 1-14); regarding claim 14 performing a normal packet transmission processing on the stream (Fig. 2, block diagram illustrating network device router or switch, see “it involves the downloading of the program” recited in paragraph 0030 line 1-7), while the individual program suitable for the characteristic is being downloaded (Fig. 2, block diagram illustrating network device router or switch, see “the physical location of the stored program is transparent to API” recited in paragraph 0031 line 1-6) and performing a packet processing continuously by incorporating the individual program into the packet processing once the download of the individual program is completed (Fig. 2, block diagram illustrating network device router or switch, see “the stored program is being executed in packet processing” recited in paragraph 0008 line 1-14) and regarding claim 15, further comprising storing a preliminary program beforehand (Fig. 2, block diagram illustrating network device router or switch, see “flow control table is stored within the device and maintains entries” recited in paragraph 0009 line 1-2) and performing the packet processing by incorporating the preliminary program until the download of the individual program is completed (Fig. 2, block diagram illustrating

network device router or switch, see “the stored program is being executed in packet processing” recited in paragraph 0008 line 1-14).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Jayaraman et al. by using the features, as taught by Yoshizawa et al., in order to provide a download unit which downloads the individual program from the location, a storage which stores the downloaded individual program and an execution unit which executes the individual program by incorporating the individual program into a packet processing on the stream, comprising a switch unit which provides the execution unit with a switchover instruction to incorporate the individual program after the download of the individual program is completed wherein the execution unit performs a normal packet transmission processing on the stream until receiving the switchover instruction, the storage stores a preliminary program and the switch unit provides the execution unit with a switchover instruction to incorporate the preliminary program until the download of the individual program is completed, provides the execution unit with a switchover instruction to incorporate the selected individual program; regarding claim 10, further comprising a switch unit which selects from the storage an individual program for converting the packet in accordance with a wireless communication quality if the terminal connects by wireless, and provides the execution unit with a switchover instruction to incorporate the selected individual program, storing a preliminary program beforehand and performing the packet processing by incorporating the preliminary program until the download of the individual program is

completed. The motivation of using these functions is to enhance the system in a cost effective manner.

5. Claims 4, 8, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaraman et al. (US 2003/0210694 A1) and Yoshizawa et al. (US 2003/0084186) as applied to claims 1, 5, 11 and 14 above, and further in view of Corey (US 5,995,708).

Jayaraman et al. and Yoshizawa et al. disclose claimed limitations as described in paragraph 4 above. Jayaraman et al. disclose the following features: regarding claim 4, wherein the storage stores the information, which indicates the location where the individual program is stored, in association with the individual program (Fig. 6, system architecture of designed intelligent content based router, see “ resource inspector” recited in paragraph 0118 lines 1-13); regarding claim 8, wherein the storage stores the information, which indicates the characteristic of the stream data, in association with the individual program (Fig. 6, system architecture of designed intelligent content based router, see “ resource inspector” recited in paragraph 0118 lines 1-13); regarding claim 13, further comprising storing the information, which indicates the location where the individual program is stored, in association with the individual program (Fig. 6, system architecture of designed intelligent content based router, see “ resource inspector” recited in paragraph 0118 lines 1-13) and regarding claim 16, further comprising storing the information, which indicates the characteristic of

the stream data, in association with the individual program (Fig. 6, system architecture of designed intelligent content based router, see “ resource inspector” recited in paragraph 0118 lines 1-13).

Jayaraman et al. and Yoshizawa et al. do not disclose the following features: regarding claim 4, if the information extracted by the extraction unit, which indicates the location where the individual program is stored, has been already stored in the storage, the individual program is not downloaded once more and the packet processing is performed using the individual program stored in the storage; regarding claim 8, if the information extracted by the extraction unit, which indicates the characteristic of the stream data, has been already stored in the storage, the packet processing using the individual program stored in the storage is performed without downloading the individual program; regarding claim 13, wherein if the information extracted by the extraction unit, which indicates the location where the individual program is stored, has been already stored, the individual program is not downloaded once more and the packet processing is performed using the stored individual program and regarding claim 16, wherein if the information extracted by the extraction unit, which indicates the characteristic of the stream data, has been already stored, the individual program is not downloaded once more and the packet processing is performed using the stored individual program.

Corey discloses a communication system for delivering programs based upon program requests from remote viewing stations with the following features; regarding claim 4 if the information extracted by the extraction unit, which indicates the location where the individual program is stored, has been already stored in the storage, the

individual program is not downloaded once more (Fig. 1, delivering data to remote viewing station, see “determining whether requested data is stored step 112” recited in column 5 lines 11-16 and 22-26) and the packet processing is performed using the individual program stored in the storage (Fig. 1, delivering data to remote viewing station, see “the system control unit 218 downloads program and processing data for transmission via network interface 216” recited in column 5 lines 60-67 and column 6 lines 1-3); regarding claim 8 if the information extracted by the extraction unit, which indicates the characteristic of the stream data, has been already stored in the storage (Fig. 1, delivering data to remote viewing station, see “determining whether requested data is stored step 112” recited in column 5 lines 11-16 and 22-26), the packet processing using the individual program stored in the storage is performed without downloading the individual program (Fig. 1, delivering data to remote viewing station, see “begins transmitting at step 118 before completing step 114” recited in column 5 lines 27-33); regarding claim 13, wherein if the information extracted by the extraction unit, which indicates the location where the individual program is stored, has been already stored, the individual program is not downloaded once more (Fig. 1, delivering data to remote viewing station, see “determining whether requested data is stored step 112” recited in column 5 lines 11-16 and 22-26) and the packet processing is performed using the stored individual program (Fig. 1, delivering data to remote viewing station, see “the system control unit 218 downloads program and processing data for transmission via network interface 216” recited in column 5 lines 60-67 and column 6 lines 1-3) and regarding claim 16, wherein if the information extracted by the extraction

unit, which indicates the characteristic of the stream data, has been already stored, the individual program is not downloaded once more (Fig. 1, delivering data to remote viewing station, see “determining whether requested data is stored step 112” recited in column 5 lines 11-16 and 22-26) and the packet processing is performed using the stored individual program (Fig. 1, delivering data to remote viewing station, see “transmission of stored data from storage to remote stations” recited in column 4 lines 34-51) and the packet processing is performed using the stored individual program (Fig. 1, delivering data to remote viewing station, see “the system control unit 218 downloads program and processing data for transmission via network interface 216” recited in column 5 lines 60-67 and column 6 lines 1-3).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Jayaraman et al. with Yoshizawa et al. by using the features, as taught by Corey, in order to provide if the information extracted by the extraction unit, which indicates the location where the individual program is stored, has been already stored in the storage, the individual program is not downloaded once more and the packet processing is performed using the individual program stored in the storage. The motivation of using these functions is to enhance the system in a cost effective manner.

Response to Arguments

6. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED BOKHARI whose telephone number is (571)270-3115. The examiner can normally be reached on Monday through Friday 8:00-17:00 Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Syed Bokhari/

Examiner, Art Unit 2616

5/27/2008

Application/Control Number:
10/721,998
Art Unit: 2616

Page 17

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2616